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10/698,606	10/30/2003	Sumit Roy	200313378-1	9857

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EXAMINER
DUONG, CHRISTINE T

ART UNIT	PAPER NUMBER
2616	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)
Office Action Summary	10/698,606	ROY ET AL.
	Examiner	Art Unit	
	CHRISTINE DUONG	2616	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 April 2008*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

This is in response to the Applicant's arguments and amendments filed on 15 April
2008 in which claims 1-26 are currently pending.

Claim Rejections - 35 USC § 102

1.   Claims 9-13, 14, 16, 22-24, 26 are rejected under 35 U.S.C. 102(b) as being
anticipated by White et al. (PG Pub US 2002/0049979 A1, hereafter White).

Regarding claims **9 and 22**, White disclose a method and computer-usable medium
having computer-readable program code embodied therein for causing a network mixing
device to perform a method of streaming media, said method (figs. 1-3) comprising:

receiving a plurality of media streams, said plurality of media streams having a
mutual downstream destination and respective initial bandwidths associated therewith
("event 100 is viewed and recorded by the four cameras 102A to 102D. The images from
cameras 102A to 102D is captured and edited by system 110. System 110 creates two
streams of video data. One stream is the images captured by "one" selected camera. The
second stream consists of 'thumbnails" (i.e. small low resolution images) of the images
captured by each of the four cameras 102A to 102D" [0023] lines 3-11 and "the two video
streams are sent to a user terminal and display 111" [0024] lines 1-2 and flowing table
showing the bandwidth requirements of various configurations [0054]);

performing a service on each of said plurality of media streams, said service
reducing a respective initial bandwidth of each of said plurality of media stream ("a low
resolution version of each data stream is created. Creating the low resolution image in

effect shrinks the size of the images. If desired the frame rate can be reduced by eliminating frames in order to further reduce the bandwidth required" [0026] lines 3-9);

streaming said plurality of media streams at less than their respective initial bandwidths ("the four thumbnail images have a lower resolution and all four thumbnail images can be transmitted as a single data stream" [0024] lines 8-10);

selecting at least one media stream from said plurality of media streams ("images from the camera associated with the thumbnail which was clicked are transmitted as the focus stream" [0025] lines 15-17); and

streaming said at least one media stream at its initial bandwidth ("Stream F is the focus stream of images which transmits the high resolution images which appear on the user's display" [0027] lines 9-11).

Regarding claims **10 and 23**, White disclose everything claimed as applied above (see claims 9 and 22 respectively). In addition, White discloses said service comprises a transcoding operation ("a low resolution version of each data stream is created. Creating the low resolution image in effect shrinks the size of the images. If desired the frame rate can be reduced by eliminating frames in order to further reduce the bandwidth required" [0026] lines 3-9).

Regarding claims **11 and 24**, White disclose everything claimed as applied above (see claims 10 and 22 respectively). In addition, White discloses said transcoding operation is selected from the group consisting of bitrate reduction, rate shaping, spatial downsampling, spatial resolution reduction, frame rate reduction, key frame selection, a change in compression format, data packet elimination, and data packet truncation ("a low

resolution version of each data stream is created. Creating the low resolution image in effect shrinks the size of the images. If desired the frame rate can be reduced by eliminating frames in order to further reduce the bandwidth required" [0026] lines 3-9).

Regarding claim **12**, White disclose everything claimed as applied above (see claim 9). In addition, White discloses receiving information identifying a type of service to be performed ("If desired the frame rate can be reduced by eliminating frames in order to further reduce the bandwidth required" [0026] lines 7-9).

Regarding claim **13**, White disclose everything claimed as applied above (see claim 9). In addition, White discloses a single device receives said media streams and performs said service ("The images from cameras 102A to 102D is captured and edited by system 110" [0023] lines 5-6).

Regarding claim **14**, White disclose everything claimed as applied above (see claim 9). In addition, White disclose said media streams are received at respective devices, each device servicing a respective media stream ("Each handler is specialized and can handle a specific type of stream. For example one handler handles the thumbnail stream and another handler handles the focus stream. The thumbnail handler divides the composite images in the thumbnail stream into individual images. The handlers use a set of decoding, decompression and parsing programs 455A to 455B as appropriate" [0038] lines 9-15).

Regarding claims **16 and 26**, White disclose everything claimed as applied above (see claims 9 and 22 respectively). White discloses recording said media streams prior to

said performing of said service ("an event 100 is viewed and recorded by the four cameras 102A to 102D" [0023] lines 3-4).

Claim Rejections - 35 USC § 103

2.　　　Claims 15, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over White.

　　　　Regarding claims **15 and 25**, White disclose everything claimed as applied above (see claims 9 and 22 respectively). However, White fail to specifically disclose said selecting is made according to an edit list comprising instructions for editing said media streams.

　　　　Nevertheless, in another embodiment, White teaches "The interactivity markup stream S3 describes regions of the presentation which provide for addition user interaction. For example there may be a button and clicking on this button might cause something to happen. The interactivity markup stream consists of a series of encoded commands which give type and position information" ([0049] lines 1-6).

　　　　Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to make said selecting according to an edit list comprising instructions for editing said media streams because it will "provide for additional user interaction" (White [0049] lines 2-3).

3.　　　Claims 1-8 and 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips further in view of White.

Regarding claims **1 and 17**, Phillips disclose a method and computer-usable

medium having computer-readable program code embodied therein for causing a network

mixing device to perform a method of streaming media, said method (fig. 7b) comprising:

receiving a plurality of media streams (full channel A 710a and full channel B 720a,

fig. 7c), said plurality of media streams having a mutual downstream destination (display

device 750, fig. 7c) and a total bandwidth associated therewith ("Video signal A 530 may

be formatted as a higher resolution, larger size, and/or lower compression than that of

video signal B 532. This can be done to save transmission bandwidth without significantly

degrading the end user's enjoyment" [0126] lines 5-9);

receiving information allowing identification of a selected media stream from said

plurality of media streams ("Using such a selector, a user can indicate a source of video

information, or other data that the user desires to be displayed on the full screen of home

appliance 550, or a portion of home appliance 550" [0120] lines 20-23);

performing a service on each of said plurality of media streams except for said

selected media stream, said service reducing a respective initial bandwidth of each of said

plurality of media streams other than said selected media stream so that said total

bandwidth is reduced ("full channel A 710a is transmitted to NID 520 as video signal A

530. In addition, full channel B 720a is reduced, to form reduced channel B 720c. Reduced

channel B 720c is then transmitted to NID 520 as video signal B 532. Reduced channel B

720c can be reduced in size, resolution, and/or bandwidth" [0131] lines 3-8); and

streaming said plurality of media streams, wherein said plurality of media streams

other than said selected media stream are streamed at less than their respective initial

bandwidths ("NID 520 forms a composite signal with the reduced channel B 720c,

represented as an image 720b, superimposed over full channel 710a, represented as an

image 710b. The composite signal is then provided to a display device that displays an

image. 750" [0131] lines 12-16).

However, Phillips fails to specifically disclose an editor device at said mutual

downstream destination, streaming said plurality of media streams to said editor device

and said editor device is for receiving information selecting which of said plurality of media

streams are selected for broadcast to viewers such that only said selected media stream is

broadcast.

Nevertheless, White teaches a capture station 703 and an edit station 704 in figs. 7-

8. Additionally, White discloses "in situations where an event such as a sporting event is

captured with multiple cameras, is to utilize an editor or technician in a control room to

select the best view at each instant. This single view is transmitted and presented to users

that are observing the event on a single screen" ([0007]). White shows in fig. 8 that a clip

is selected at the capture station 703 from incoming video streams and eventually the clip

is posted on the web for viewing.

Therefore, it would have been obvious to a person having ordinary skill in the art at

the time the invention was made to have an editor device at said mutual downstream

destination, streaming said plurality of media streams to said editor device and said editor

device is for receiving information selecting which of said plurality of media streams are

selected for broadcast to viewers such that only said selected media stream is broadcast

because it will "make multiple streams available to a user without using an undue amount of bandwidth" ([0007]).

Regarding claims **2 and 18**, Phillips and White disclose everything claimed as applied above (see claims 1 and 17 respectively). In addition, Phillips disclose said service comprises a transcoding operation ("Reduced channel B 720c can be reduced in size, resolution, and/or bandwidth" [0131] lines 3-8).

Regarding claims **3 and 19**, Phillips and White disclose everything claimed as applied above (see claims 2 and 17 respectively). In addition, Phillips disclose said transcoding operation is selected from the group consisting of bitrate reduction, rate shaping, spatial downsampling, spatial resolution reduction, frame rate reduction, key frame selection, a change in compression format, data packet elimination, and data packet truncation ("Reduced channel B 720c can be reduced in size, resolution, and/or bandwidth" [0131] lines 3-8).

Regarding claim **4**, Phillips and White disclose everything claimed as applied above (see claim 1). In addition, Phillips disclose receiving information identifying a type of service to be performed ("The user can further indicate that channel ten is one eighth the size of the full screen, or one eighth the size of the main screen" [0121] lines 5-7).

Regarding claim **5**, Phillips and White disclose everything claimed as applied above (see claim 1). In addition, Phillips disclose a single device receives said plurality of media streams and performs said service ("head end server 510 reduces fill channel B 720a prior to transmitting to NID 520" [0131] lines 1-3).

Regarding claim **6**, Phillips and White disclose everything claimed as applied above (see claim 1). However, Phillips fail to specifically disclose said plurality of media streams are received at respective devices, each device servicing a respective media stream.

Nevertheless, White teaches "Each handler is specialized and can handle a specific type of stream. For example one handler handles the thumbnail stream and another handler handles the focus stream. The thumbnail handler divides the composite images in the thumbnail stream into individual images. The handlers use a set of decoding, decompression and parsing programs 455A to 455B as appropriate" (White [0038] lines 9-15).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have said plurality of media streams received at respective devices, each device servicing a respective media stream because "any handler can use any appropriate decoder and parser to process image data as appropriate" (White [0038] lines 21-23).

Regarding claims **7 and 20**, Phillips and White disclose everything claimed as applied above (see claims 1 and 17 respectively). However, Phillips fail to specifically disclose said information is generated according to an edit list comprising instructions for editing said plurality of media streams.

Nevertheless, White teaches "The interactivity markup stream S3 describes regions of the presentation which provide for addition user interaction. For example there may be a button and clicking on this button might cause something to happen. The interactivity

markup stream consists of a series of encoded commands which give type and position information" (White [0049] lines 1-6).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to generate said information according to an edit list comprising instructions for editing said plurality of media streams because it will "provide for additional user interaction" (White [0049] lines 2-3).

Regarding claims **8 and 21**, Phillips and White disclose everything claimed as applied above (see claims 1 and 17 respectively). In addition, Phillips disclose recording said media streams prior to said performing of said service ("One application device 246 that may be included is a digital-recorder application device, which could provide a mechanism for digital recording of all forms of information incoming to the AND 200 and make them accessible to a user at the customer premises. The information that could be recorded includes video, data, voice, among other types of information" [0090] lines 8-13).

Response to Arguments

In response to Applicant's arguments that White does not teach, describe or suggest streaming said plurality of media streams at less than their respective initial bandwidths, the examiner respectfully disagrees. White discloses "the second stream consists of "thumbnails" (i.e. small low resolution images) of the images captured by each of the four cameras 102A to 102D)" ([0023]) and "the corresponding thumbnail images from each data stream are placed next to each other to form composite images. The streams of these composite images is the thumbnail data stream" ([0026]) and "a low resolution version of each data stream is created. Low resolution images can, for

example, be created by selecting and using only every fourth pixel in each image. Creating the low resolution image in effect shrinks the size of the images. If desired the frame rate can be reduced by eliminating frames in order to further reduce the bandwidth required" ([0026]). This shows that the original streams received by the various cameras have their bandwidths reduced and are further streamed. Therefore, White discloses streaming said plurality of media streams at less than their respective initial bandwidths.

4.   Applicant's arguments with respect to claims 1 and 17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTINE DUONG whose telephone number is

(571)270-1664. The examiner can normally be reached on Monday - Friday: 830 AM-6

PM EST.

      If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

      Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

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                                                    /Seema S. Rao/
                                                    Supervisory Patent Examiner, Art
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/Christine Duong/
Examiner, Art Unit 2616
07/01/2008